



October 24, 2013

Ms. Grissel V. Diaz-Cotto  
Emergency and Remedial Response Division  
United States Environmental Protection Agency  
Region II  
290 Broadway, 19<sup>th</sup> Floor  
New York, NY 10007-1866

**Re: September 2013 Discharge Monitoring Report  
Leachate Treatment Plant, Operable Unit 1  
Kin-Buc Landfill Superfund Site**

Dear Ms. Diaz-Cotto:

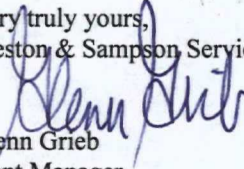
Please find enclosed the September 2013 Discharge Monitoring Report (DMR) for the Leachate Treatment Plant of Operable Unit One at the Kin-Buc Landfill Superfund Site.

Weston & Sampson Services, Inc. would like to confirm the following:

- Effluent parameters sampled throughout month were within permitted limits.

Should you have any questions concerning this DMR or the Treatment Plant, please contact me at your earliest convenience at the Kin-Buc site.

Very truly yours,  
Weston & Sampson Services, Inc. on behalf of SCA Services, Inc.

  
Glenn Grieb  
Plant Manager  
Enclosure

Cc: Martha Goodwin – NJDEP  
Stephen Joyce – SC Holdings, Inc.  
Carl Januszkiewicz – SC Holdings, Inc.  
John A. Bocchino, Jr. – Weston & Sampson Services, Inc.

294324



|   |   |  |  |  |  |   |
|---|---|--|--|--|--|---|
| <b>Connecticut</b><br>273 Dividend Road<br>Rocky Hill, CT 06067 | <b>Rhode Island</b><br>477B Tiogue Avenue<br>Coventry, RI 02816 | <b>New Hampshire</b><br>100 International Drive<br>Suite 152<br>Portsmouth, NH 03801 | <b>Maine</b><br>PO Box 189<br>York, ME 03909 | <b>Vermont</b><br>96 South Main Street<br>Suite 2<br>Waterbury, VT 05676 | <b>New York</b><br>301 Manchester Road<br>Suite 201A<br>Poughkeepsie, NY 12603 | <b>Florida</b><br>1990 Main Street<br>Suite 750<br>Sarasota, FL 34236 |
|---|---|--|--|--|--|---|

When it's essential...it's Weston&Sampson.®

Date October 22, 2013

Blank lined paper for writing.

MONTH 

|   |   |
|---|---|
| 0 | 9 |
|---|---|

 YEAR 

|   |   |
|---|---|
| 1 | 3 |
|---|---|

**Day of Month**  
**Licensed Operator**  
**Others**

|    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 2  | 4  | 8  | 0  | 8  | 6  | 8  | 2  | 8  | 8  | 8  | 4  | 8  | 4  | 2  | 8  |
| 2  | 8  | 24 | 16 | 12 | 16 | 8  | 4  | 16 | 16 | 8  | 16 | 8  | 0  | 0  | 8  |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |    |    |
| 8  | 8  | 8  | 8  | 6  | 4  | 3  | 4  | 5  | 3  | 3  | 6  | 4  | 3  |    |    |
| 16 | 16 | 16 | 12 | 4  | 4  | 16 | 16 | 16 | 24 | 16 | 6  | 2  | 8  |    |    |

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF WATER QUALITY

MONITORING REPORT - TRANSMITTAL SHEET

NJPDDES NO.  
\* 

|  |  |  |  |  |  |
|--|--|--|--|--|--|
|  |  |  |  |  |  |
|--|--|--|--|--|--|

  
\*NJ Permit Equivalent

REPORTING PERIOD  
M o. Y r.      M o. Y r.  

|   |   |   |   |
|---|---|---|---|
| 0 | 9 | 1 | 3 |
|---|---|---|---|

|   |   |   |   |
|---|---|---|---|
| 0 | 9 | 1 | 3 |
|---|---|---|---|

**PERMITTEE:**      Name: SCA Services, Inc.  
                         Address: 383 Meadow Road  
                                 Edison, New Jersey 08817

**FACILITY:**      Name: Kin-Buc Landfill  
                         Address: 383 Meadow Road  
                                 Edison, New Jersey 08817  
                         Telephone: 732-572-4743

FORMS ATTACHED (Indicate Quantity of Each)

Operating Exceptions

SLUDGE REPORT-SANITARY  
\_\_ T-VWX-007 \_\_ T-VWX-008 \_\_ T-VWX-009  
\_\_ EPA Form 3320-1

DYE TESTING      YES NO  
                                 \_\_ X

SLUDGE REPORT-INDUSTRIAL  
\_\_ T-VWX-010A \_\_ T-VWX-010B

TEMPORARY BYPASSING      \_\_ X

DISINFECTION INTERRUPTION      \_\_ X

WASTEWATER REPORTS  
\_\_ T-VWX-011 \_\_ T-VWX-012 \_\_ T-VWX-013

MONITORING MALFUNCTIONS      \_\_ X

GROUNDWATER REPORTS  
\_\_ T-VWX-015(A,B) \_\_ T-VWX-016 \_\_ T-VWX-017  
\_\_ ELECTRONIC SUBMISSION

UNITS OF OPERATION      \_\_ X

OTHER      \_\_ X

NPDES DISCHARGE MONITORING  
1 EPA Form 3320-1

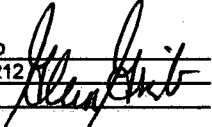
(Detail any "Yes" on reverse side in appropriate space.)

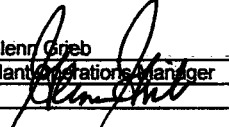
NOTE: The "Hours Attended at Plant" on the reverse of this sheet must also be completed.

**AUTHENTICATION** I certify under penalty of law that this document and all attachments were prepared under the direction or supervision in accordance with a system designed to assure my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

**LICENSED OPERATOR**

**PRINCIPAL EXECUTIVE OFFICER OR  
DULY AUTHORIZED REPRESENTATIVE**

Name (Printed) Glenn Grieb  
Grade & Registry No. N-4 ; 0021212  
Signature 

Name (Printed) Glenn Grieb  
Title (Printed) Plant Operations Manager  
Signature 

PERMITTEE: NAME/ADDRESS

NAME  
ADDRESS

FACILITY  
LOCATION

**SCA SERVICES, INC.**  
**383 MEADOW ROAD**  
**EDISON, NEW JERSEY 08817**

**KIN-BUC LANDFILL**  
**EDISON, NEW JERSEY**  
**CARL JANUSZKIEWICZ**

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
DISCHARGE MONITORING REPORT

NJ PERMIT EQUIVALENT  
PERMIT NUMBER

**001**  
DISCHARGE NUMBER

| MONITORING PERIOD |    |     |      |    |     |
|-------------------|----|-----|------|----|-----|
| YEAR              | MO | DAY | YEAR | MO | DAY |
| 13                | 09 | 01  | 13   | 09 | 30  |

| PARAMETER                              |                    | QUANTITY OR LOADING   |          |        | QUALITY OR CONCENTRATION |         |              |        | NO. EX      | FREQUENCY OF ANALYSIS | SAMPLE TYPE |
|--|--------------------|---|----------|--------|--------------------------|---------|--------------|--------|-------------|-----------------------|-------------|
|  |                    | AVERAGE   | MAXIMUM  | UNITS  | MINIMUM                  | AVERAGE | MAXIMUM      | UNITS  |             |                       |             |
| FLOW                                   | SAMPLE MEASUREMENT | 0.022993  | 0.034219 | MGD    | *****                    | *****   | *****        | ***    | ***         | continuous            | flow meter  |
|  | PERMIT REQUIREMENT | REPORT  | ONLY     |        | *****                    | *****   | *****        |        |             | continuous            | flow meter  |
| pH                                     | SAMPLE MEASUREMENT | *****   | *****    | ***    | 8.31                     | *****   | 8.72         | S.U.   | 0           | 1/week                | grab        |
|  | PERMIT REQUIREMENT | *****   | *****    |        | 6.0                      | *****   | 9.0          |        |             | weekly                | grab        |
| PETROLEUM HYDROCARBONS                 | SAMPLE MEASUREMENT | *****   | *****    | ***    | *****                    | 0.43    | 0.4          | mg/l   | 0           | 2/month               | grab        |
|  | PERMIT REQUIREMENT | *****   | *****    |        | *****                    | 10      | 15           |        |             | 2/month               | grab        |
| COD                                    | SAMPLE MEASUREMENT | 19.07   | 19.33    | kg/day | *****                    | 171.0   | 173          | mg/l   | 0           | 2/month               | comp.       |
|  | PERMIT REQUIREMENT | REPORT  | ONLY     |        | *****                    | REPORT  | ONLY         |        |             | 2/month               | comp.       |
| BOD                                    | SAMPLE MEASUREMENT | *****   | *****    | ***    | *****                    | 1.70    | 1.70         | mg/l   | 0           | 2/month               | comp.       |
|  | PERMIT REQUIREMENT | *****   | *****    |        | *****                    | 58      | 220          |        |             | 2/month               | comp.       |
| TOTAL SUSPENDED SOLIDS                 | SAMPLE MEASUREMENT | 0.60  | 1.06     | kg/day | *****                    | 5.35    | 9.60         | mg/l   | 0           | 1/week                | comp.       |
|  | PERMIT REQUIREMENT | REPORT  | ONLY     |        | *****                    | 30      | 45(1)        |        |             | weekly                | comp.       |
| DISSOLVED OXYGEN                       | SAMPLE MEASUREMENT | *****   | *****    | ***    | 6.81                     | *****   | *****        | mg/l   | 0           | 1/week                | grab        |
|  | PERMIT REQUIREMENT | *****   | *****    |        | 4.0 MIN<br>Instantaneous | *****   | *****        |        |             | weekly                | grab        |
| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER |                    | I certify under penalty of law that I have personally examined and I am familiar with the information submitted herein, and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. See 18 U.S.C. 1001 & 33 U.S.C. 1319. (Penalties under these statutes may include fines up to \$10,000 and/or maximum imprisonment of between 6 months and 5 years) |          |        |                          |         | TELEPHONE    |        | DATE        |                       |             |
| Glenn Grieb<br>Project Manager         |                    |   |          |        |                          |         | 732 572-4743 |        | 13 10 22    |                       |             |
| TYPED OR PRINTED                       |                    | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT  |          |        |                          |         | AREA CODE    | NUMBER | YEAR MO DAY |                       |             |

COMMENTS AND EXPLANATIONS OF ANY VIOLATIONS

(REFERENCE ALL ATTACHMENTS HERE)

PERMITTEE NAME/ADDRESS

NAME  
ADDRESS

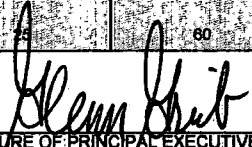
SCA SERVICES, INC.  
383 MEADOW ROAD  
EDISON, NEW JERSEY 08817

FACILITY  
LOCATION  
ATTN:

KIN-BUC LANDFILL  
EDISON, NEW JERSEY  
CARL JANUSZKIEWICZ

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
DISCHARGE MONITORING REPORT

|                                       |    |     |                         |    |     |
|---------------------------------------|----|-----|-------------------------|----|-----|
| NJ PERMIT EQUIVALENT<br>PERMIT NUMBER |    |     | 001<br>DISCHARGE NUMBER |    |     |
| MONITORING PERIOD                     |    |     |                         |    |     |
| YEAR                                  | MO | DAY | YEAR                    | MO | DAY |
| 13                                    | 09 | 01  | 13                      | 09 | 30  |

| PARAMETER                              |                    | QUANTITY OR LOADING   |            |        | QUALITY OR CONCENTRATION |   |         |              | NO. EX | FREQUENCY OF ANALYSIS | SAMPLE TYPE |
|--|--------------------|---|------------|--------|--------------------------|---|---------|--------------|--------|-----------------------|-------------|
|  |                    | AVERAGE   | MAXIMUM    | UNITS  | MINIMUM                  | AVERAGE   | MAXIMUM | UNITS        |        |                       |             |
| BENZENE                                | SAMPLE MEASUREMENT | <0.0000124  | <0.0000160 | kg/day | *****                    | 0.11  | 0.14    | ug/L         | 0      | 2/month               | grab        |
|  | PERMIT REQUIREMENT | 0.009   | 0.02       |        | *****                    | 57  | 134     |              |        |                       |             |
| CHLOROBENZENE                          | SAMPLE MEASUREMENT | <0.0000134  | <0.0000149 | kg/day | *****                    | <0.12   | <0.13   | ug/L         | 0      | 2/month               | grab        |
|  | PERMIT REQUIREMENT | 0.022   | 0.056      |        | *****                    | 142   | 360     |              |        |                       |             |
| 1,1 DICHLOROETHENE                     | SAMPLE MEASUREMENT | <0.0000145  | <0.0000149 | kg/day | *****                    | <0.13   | <0.13   | ug/L         | 0      | 2/month               | grab        |
|  | PERMIT REQUIREMENT | 0.003   | 0.009      |        | *****                    | 22  | 59      |              |        |                       |             |
| ETHYLBENZENE                           | SAMPLE MEASUREMENT | <0.0000112  | <0.0000114 | kg/day | *****                    | <0.10   | <0.10   | ug/L         | 0      | 2/month               | grab        |
|  | PERMIT REQUIREMENT | 0.022   | 0.058      |        | *****                    | 142   | 360     |              |        |                       |             |
| TETRACHLOROETHYLENE                    | SAMPLE MEASUREMENT | <0.0000112  | <0.0000114 | kg/day | *****                    | <0.10   | <0.10   | ug/L         | 0      | 2/month               | grab        |
|  | PERMIT REQUIREMENT | 0.008   | 0.025      |        | *****                    | 52  | 164     |              |        |                       |             |
| TOLUENE                                | SAMPLE MEASUREMENT | <0.0000167  | 0.000172   | kg/day | *****                    | <0.15   | <0.15   | ug/L         | 0      | 2/month               | grab        |
|  | PERMIT REQUIREMENT | 0.004   | 0.011      |        | *****                    | 28  | 74      |              |        |                       |             |
| 1,2-TRANSDICHLOROETHYLENE              | SAMPLE MEASUREMENT | <0.0000145  | <0.0000149 | kg/day | *****                    | <0.13   | <0.13   | ug/L         | 0      | 2/month               | grab        |
|  | PERMIT REQUIREMENT | 0.004   | 0.009      |        | *****                    | 22  | 59      |              |        |                       |             |
| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER |                    | I certify under penalty of law that I have personally examined and I am familiar with the information submitted herein, and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. See 18 U.S.C. 1001 & 33 U.S.C. 1319. (Penalties under these statutes may include fines up to \$10,000 and/or maximum imprisonment of between 6 months and 5 years) |            |        |                          | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT                          |         | TELEPHONE    |        | DATE                  |             |
| Glenn Grieb<br>Project Manager         |                    |   |            |        |                          |  |         | 732 572-4743 |        | 13   10   22          |             |
| TYPED OR PRINTED                       |                    | AREA CODE   |            | NUMBER |                          | YEAR  |         | MO           |        | DAY                   |             |

COMMENTS AND EXPLANATIONS OF ANY VIOLATIONS

(REFERENCE ALL ATTACHMENTS HERE)

PERMITTEE NAME/ADDRESS  
NAME:  
ADDRESS:

SCA SERVICES, INC.  
383 MEADOW ROAD  
EDISON, NEW JERSEY 08817

FACILITY  
LOCATION  
ATTN:

KIN-BUC LANDFILL  
EDISON, NEW JERSEY  
CARL JANUSZKIEWICZ

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
DISCHARGE MONITORING REPORT

|                      |    |     |                  |      |    |     |
|----------------------|----|-----|------------------|------|----|-----|
| NJ PERMIT EQUIVALENT |    |     | 001              |      |    |     |
| PERMIT NUMBER        |    |     | DISCHARGE NUMBER |      |    |     |
| MONITORING PERIOD    |    |     |                  |      |    |     |
| YEAR                 | MO | DAY | TO               | YEAR | MO | DAY |
| 13                   | 09 | 01  |                  | 13   | 09 | 30  |

| PARAMETER                                   |                    | QUANTITY OR LOADING   |            |        | QUALITY OR CONCENTRATION |              |         |          | NO. EX | FREQUENCY OF ANALYSIS | SAMPLE TYPE |
|---|--------------------|---|------------|--------|--------------------------|--------------|---------|----------|--------|-----------------------|-------------|
|   |                    | AVERAGE   | MAXIMUM    | UNITS  | MINIMUM                  | AVERAGE      | MAXIMUM | UNITS    |        |                       |             |
| TRICHLOROETHYLENE                           | SAMPLE MEASUREMENT | <0.0000100  | <0.0000103 | kg/day | *****                    | <0.09        | <0.09   | ug/L     | 0      | 2/month               | grab        |
|   | PERMIT REQUIREMENT | 0.004   | 0.010      |        | *****                    | 28           | 69      |          |        | 2/month               | grab        |
| VINYL CHLORIDE                              | SAMPLE MEASUREMENT | <0.0000160  | <0.0000164 | kg/day | *****                    | <0.14        | <0.14   | ug/L     | 0      | 1/week                | grab        |
|   | PERMIT REQUIREMENT | 0.008   | 0.016      |        | *****                    | 52.8         | 106     |          |        | weekly                | grab        |
| ACENAPHTHYLENE                              | SAMPLE MEASUREMENT | <0.0000040  | <0.0000041 | kg/day | *****                    | <0.038       | <0.038  | ug/L     | 0      | 1/month               | grab        |
|   | PERMIT REQUIREMENT | 0.00026   | 0.00052    |        | *****                    | 1.72         | 3.43    |          |        | monthly               | grab        |
| BENZO(A)ANTHRACENE                          | SAMPLE MEASUREMENT | <0.0000050  | <0.0000051 | kg/day | *****                    | <0.04        | <0.05   | ug/L     | 0      | 1/month               | grab        |
|   | PERMIT REQUIREMENT | 0.00026   | 0.00052    |        | *****                    | 1.72         | 3.43    |          |        | monthly               | grab        |
| BENZO(A)PYRENE                              | SAMPLE MEASUREMENT | <0.0000067  | <0.0000070 | kg/day | *****                    | <0.060       | <0.061  | ug/L     | 0      | 1/month               | grab        |
|   | PERMIT REQUIREMENT | 0.00026   | 0.00052    |        | *****                    | 1.72         | 3.43    |          |        | monthly               | grab        |
| BENZO(gh)PERYLENE                           | SAMPLE MEASUREMENT | <0.0000117  | <0.0000128 | kg/day | *****                    | <0.105       | <0.110  | ug/L     | 0      | 1/month               | grab        |
|   | PERMIT REQUIREMENT | 0.00026   | 0.00052    |        | *****                    | 1.72         | 3.43    |          |        | monthly               | grab        |
| BENZO(K)FLUORANTHENE                        | SAMPLE MEASUREMENT | <0.0000049  | <0.0000050 | kg/day | *****                    | <0.044       | <0.044  | ug/L     | 0      | 1/month               | grab        |
|   | PERMIT REQUIREMENT | 0.00026   | 0.00052    |        | *****                    | 1.72         | 3.43    |          |        | monthly               | grab        |
| NAME/TITLE: PRINCIPAL EXECUTIVE OFFICER     |                    | I certify under penalty of law that I have personally examined and I am familiar with the information submitted herein, and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. See 18 U.S.C. 1001 & 33 U.S.C. 1319. (Penalties under these statutes may include fines up to \$10,000 and/or maximum imprisonment of between 6 months and 5 years) |            |        |                          | TELEPHONE    |         | DATE     |        |                       |             |
| Glenn Grieb<br>Project Manager              |                    |   |            |        |                          | 732 572-4743 |         | 13 10 22 |        |                       |             |
| TYPED OR PRINTED                            |                    | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT  |            |        |                          | AREA CODE    | NUMBER  | YEAR     | MO     | DAY                   |             |
| COMMENTS AND EXPLANATIONS OF ANY VIOLATIONS |                    | (REFERENCE ALL ATTACHMENTS HERE)  |            |        |                          |              |         |          |        |                       |             |
|   |                    | <0.00017  |            |        |                          |              |         |          |        |                       |             |

PERMITTEE NAME/ADDRESS  
NAME:  
ADDRESS:

FACILITY  
LOCATION  
ATTN:

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383 MEADOW ROAD  
EDISON, NEW JERSEY 08817

KIN-BUC LANDFILL  
EDISON, NEW JERSEY  
CARL JANUSZKIEWICZ

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
DISCHARGE MONITORING REPORT

|                      |    |     |                  |      |    |     |
|----------------------|----|-----|------------------|------|----|-----|
| NJ PERMIT EQUIVALENT |    |     | 001              |      |    |     |
| PERMIT NUMBER        |    |     | DISCHARGE NUMBER |      |    |     |
| MONITORING PERIOD    |    |     |                  |      |    |     |
| YEAR                 | MO | DAY | TO               | YEAR | MO | DAY |
| 13                   | 09 | 01  |                  | 13   | 09 | 30  |

| PARAMETER                                   |                    | QUANTITY OR LOADING   |            |        | QUALITY OR CONCENTRATION |              |         |          | NO. EX | FREQUENCY OF ANALYSIS | SAMPLE TYPE |
|---|--------------------|---|------------|--------|--------------------------|--------------|---------|----------|--------|-----------------------|-------------|
|   |                    | AVERAGE   | MAXIMUM    | UNITS  | MINIMUM                  | AVERAGE      | MAXIMUM | UNITS    |        |                       |             |
| IDENO(1,2,3cd) PYRENE                       | SAMPLE MEASUREMENT | <0.0000218  | <0.0000229 | kg/day | *****                    | <0.195       | <0.200  | ug/L     | 0      | 1/month               | grab        |
|   | PERMIT REQUIREMENT | 0.00026   | 0.00052    |        | *****                    | 1.72         | 3.43    |          |        | monthly               | grab        |
| PHENANTHRENE                                | SAMPLE MEASUREMENT | <0.0001857  | <0.0003637 | kg/day | *****                    | <1.587       | <3.1    | ug/L     | 0      | 1/week                | grab        |
|   | PERMIT REQUIREMENT | REPORT  | ONLY       |        | *****                    | REPORT ONLY  | 5.4(2)  |          |        | weekly                | grab        |
| ALDRIN                                      | SAMPLE MEASUREMENT | <0.0000018  | <0.0000018 | kg/day | *****                    | <0.016       | <0.016  | ug/L     | 0      | 1/month               | grab        |
|   | PERMIT REQUIREMENT | 0.000133  | 0.00026    |        | *****                    | 0.0875       | 0.176   |          |        | monthly               | grab        |
| 4,4-DDT                                     | SAMPLE MEASUREMENT | <0.0000031  | <0.0000032 | kg/day | *****                    | <0.027       | <0.027  | ug/L     | 0      | 1/week                | grab        |
|   | PERMIT REQUIREMENT | 0.0000576   | 0.000146   |        | *****                    | 0.38         | 0.765   |          |        | weekly                | grab        |
| PCB-1242                                    | SAMPLE MEASUREMENT | <0.0000073  | <0.0000088 | kg/day | *****                    | <0.08        | <0.08   | ug/L     | 0      | 1/week                | grab        |
|   | PERMIT REQUIREMENT | REPORT  | ONLY       |        | *****                    | REPORT ONLY  | 0.5(2)  |          |        | weekly                | grab        |
| PCB-1248                                    | SAMPLE MEASUREMENT | <0.0000087  | <0.0000090 | kg/day | *****                    | <0.08        | <0.08   | ug/L     | 0      | 1/week                | grab        |
|   | PERMIT REQUIREMENT | REPORT  | ONLY       |        | *****                    | REPORT ONLY  | 0.5(2)  |          |        | weekly                | grab        |
| PCB-1254                                    | SAMPLE MEASUREMENT | <0.0000085  | <0.0000088 | kg/day | *****                    | <0.07        | <0.08   | ug/L     | 0      | 1/week                | grab        |
|   | PERMIT REQUIREMENT | REPORT  | ONLY       |        | *****                    | REPORT ONLY  | 0.5(2)  |          |        | weekly                | grab        |
| NAME/TITLE: PRINCIPAL EXECUTIVE OFFICER     |                    | I certify under penalty of law that I have personally examined and I am familiar with the information submitted herein, and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. See 18 U.S.C. 1001 & 33 U.S.C. 1319. (Penalties under these statutes may include fines up to \$10,000 and/or maximum imprisonment of between 6 months and 5 years) |            |        |                          | TELEPHONE    |         | DATE     |        |                       |             |
| Glenn Grieb<br>Project Manager              |                    |   |            |        |                          | 732 572-4743 |         | 13 10 22 |        |                       |             |
| TYPED OR PRINTED                            |                    | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT  |            |        |                          | AREA CODE    | NUMBER  | YEAR     | MO     | DAY                   |             |
| COMMENTS AND EXPLANATIONS OF ANY VIOLATIONS |                    | (REFERENCE ALL ATTACHMENTS HERE)  |            |        |                          |              |         |          |        |                       |             |



PERMITTEE: NAME/ADDRESS

NAME  
ADDRESS

FACILITY  
LOCATION  
ATTN:

SCA SERVICES, INC.  
383 MEADOW ROAD  
EDISON, NEW JERSEY 08817

KIN-BUC LANDFILL  
EDISON, NEW JERSEY  
CARL JANUSZKIEWICZ

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
DISCHARGE MONITORING REPORT

|                                       |    |     |                         |      |    |     |
|---------------------------------------|----|-----|-------------------------|------|----|-----|
| NJ PERMIT EQUIVALENT<br>PERMIT NUMBER |    |     | 001<br>DISCHARGE NUMBER |      |    |     |
| MONITORING PERIOD                     |    |     |                         |      |    |     |
| YEAR                                  | MO | DAY | TO                      | YEAR | MO | DAY |
| 13                                    | 09 | 01  |                         | 13   | 09 | 30  |

| PARAMETER                                   |                       | QUANTITY OR LOADING   |            |        | QUALITY OR CONCENTRATION |                     |         |             | NO.<br>EX | FREQUENCY<br>OF<br>ANALYSIS | SAMPLE<br>TYPE |
|---|-----------------------|---|------------|--------|--------------------------|---------------------|---------|-------------|-----------|-----------------------------|----------------|
|   |                       | AVERAGE   | MAXIMUM    | UNITS  | MINIMUM                  | AVERAGE             | MAXIMUM | UNITS       |           |                             |                |
| PCB-1280                                    | SAMPLE<br>MEASUREMENT | <0.0000085  | <0.0000088 | kg/day | *****                    | <0.07               | <0.08   | ug/L        | 0         | 1/week                      | grab           |
|   | PERMIT<br>REQUIREMENT | REPORT  | ONLY       |        | *****                    | REPORT ONLY         | 0.5(2)  |             |           | weekly                      | grab           |
| ARSENIC                                     | SAMPLE<br>MEASUREMENT | 0.0008873   | 0.0008125  | kg/day | *****                    | 6.00                | 7.10    | ug/L        | 0         | 1/week                      | comp           |
|   | PERMIT<br>REQUIREMENT | 0.013   | 0.026      |        | *****                    | 65.6                | 172     |             |           | weekly                      | comp           |
| CADMIUM                                     | SAMPLE<br>MEASUREMENT | <0.0002173  | <0.0002229 | kg/day | *****                    | 1.9                 | 1.9     | ug/L        | 0         | 1/week                      | comp           |
|   | PERMIT<br>REQUIREMENT | 0.0073  | 0.017      |        | *****                    | 46.2                | 112     |             |           | weekly                      | comp           |
| CHROMIUM                                    | SAMPLE<br>MEASUREMENT | 0.0004574   | 0.0004693  | kg/day | *****                    | 4.00                | 4.00    | ug/L        | 0         | 1/week                      | comp           |
|   | PERMIT<br>REQUIREMENT | 0.030   | 0.060      |        | *****                    | 158                 | 396     |             |           | weekly                      | comp           |
| COPPER                                      | SAMPLE<br>MEASUREMENT | 0.0004146   | 0.0004947  | kg/day | *****                    | 3.6                 | 4.6     | ug/L        | 0         | 1/week                      | comp           |
|   | PERMIT<br>REQUIREMENT | REPORT  | ONLY       |        | *****                    | REPORT ONLY         | 10      |             |           | weekly                      | comp           |
| LEAD  | SAMPLE<br>MEASUREMENT | 0.0001372   | 0.0001408  | kg/day | *****                    | 1.20                | 1.20    | ug/L        | 0         | 1/week                      | comp           |
|   | PERMIT<br>REQUIREMENT | REPORT  | ONLY       |        | *****                    | REPORT ONLY         | 10      |             |           | weekly                      | comp           |
| NICKEL                                      | SAMPLE<br>MEASUREMENT | 0.0036526   | 0.0039535  | kg/day | *****                    | 32.0                | 33.7    | ug/L        | 0         | 1/week                      | comp           |
|   | PERMIT<br>REQUIREMENT | 0.140   | 0.281      |        | *****                    | 921                 | 1850    |             |           | weekly                      | comp           |
| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER      |                       | I certify under penalty of law that I have personally examined and I am familiar with the information submitted herein, and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. See 18 U.S.C. 1001 & 33 U.S.C. 1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years) |            |        |                          | TELEPHONE           |         | DATE        |           |                             |                |
| Glenn Grieb<br>Project Manager              |                       |   |            |        |                          |                     |         |             |           |                             |                |
| TYPED OR PRINTED                            |                       | SIGNATURE OF PRINCIPAL EXECUTIVE<br>OFFICER OR AUTHORIZED AGENT   |            |        |                          | 732 572-4743        |         | 13 10 22    |           |                             |                |
| COMMENTS AND EXPLANATIONS OF ANY VIOLATIONS |                       | (REFERENCE ALL ATTACHMENTS HERE)  |            |        |                          | AREA<br>CODE NUMBER |         | YEAR MO DAY |           |                             |                |



PERMITTEE NAME/ADDRESS  
NAME  
ADDRESS

FACILITY  
LOCATION  
ATTN:

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383 MEADOW ROAD  
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EDISON, NEW JERSEY  
CARL JANUSZKIEWICZ

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
DISCHARGE MONITORING REPORT

|                                       |    |     |                         |      |    |     |
|---------------------------------------|----|-----|-------------------------|------|----|-----|
| NJ PERMIT EQUIVALENT<br>PERMIT NUMBER |    |     | 001<br>DISCHARGE NUMBER |      |    |     |
| MONITORING PERIOD                     |    |     |                         |      |    |     |
| YEAR                                  | MO | DAY | TO                      | YEAR | MO | DAY |
| 13                                    | 09 | 01  |                         | 13   | 09 | 30  |

| PARAMETER                              |                    | QUANTITY OR LOADING   |            |        | QUALITY OR CONCENTRATION |  |         |              | NO. EX | FREQUENCY OF ANALYSIS | SAMPLE TYPE |
|--|--------------------|---|------------|--------|--------------------------|--|---------|--------------|--------|-----------------------|-------------|
|  |                    | AVERAGE   | MAXIMUM    | UNITS  | MINIMUM                  | AVERAGE  | MAXIMUM | UNITS        |        |                       |             |
| ZINC                                   | SAMPLE MEASUREMENT | 0.0017497   | 0.0017949  | kg/day | *****                    | 15.3   | 15.3    | ug/L         | 0      | 1/week                | comp        |
|  | PERMIT REQUIREMENT | 0.177   | 0.356      |        | *****                    | 1170   | 2350    |              |        |                       |             |
| CYANIDE                                | SAMPLE MEASUREMENT | <0.0004574  | <0.0004893 | kg/day | *****                    | 4.0  | 4.0     | ug/L         | 0      | 1/week                | comp        |
|  | PERMIT REQUIREMENT | 0.002   | 0.004      |        | *****                    | 13.2   | 26.4    |              |        |                       |             |
| ALUMINUM                               | SAMPLE MEASUREMENT | 0.0376724   | 0.0629532  | kg/day | *****                    | 334.8  | 579.0   | ug/L         | 0      | 1/week                | comp        |
|  | PERMIT REQUIREMENT | 1.40  | 2.81       |        | *****                    | 8240   | 18500   |              |        |                       |             |
| IRON                                   | SAMPLE MEASUREMENT | 0.0156497   | 0.0176139  | kg/day | *****                    | 137.3  | 162.0   | ug/L         | 0      | 1/week                | comp        |
|  | PERMIT REQUIREMENT | 60.6  | 162        |        | *****                    | 632000   | 1070000 |              |        |                       |             |
| ACUTE TOXICITY, (LC50)                 | SAMPLE MEASUREMENT | QUARTELY  | REPORT     | ***    | >100%                    | *****  | *****   | %            | 0      |                       |             |
|  | PERMIT REQUIREMENT | *****   | *****      |        | 50(3)                    | *****  | *****   |              |        |                       |             |
| Ammonia                                | SAMPLE MEASUREMENT | *****   | *****      | ***    | *****                    | 0.155  | 0.180   | mg/l         | 0      | *****                 | *****       |
|  | PERMIT REQUIREMENT | *****   | *****      |        | *****                    | 4.8  | 10.0    |              |        |                       |             |
|  | SAMPLE MEASUREMENT | *****   | *****      | ***    | *****                    | *****  | *****   | ***          | ***    | *****                 | *****       |
|  | PERMIT REQUIREMENT | *****   | *****      |        | *****                    | *****  | *****   |              |        |                       |             |
| NAME/TITLE PRINCIPAL EXECUTIVE OFFICER |                    | I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. See 18 U.S.C. 1001 & 33 U.S.C. 1319. (Penalties under these statutes may include fines up to \$10,000 and/or maximum imprisonment of between 6 months and 5 years) |            |        |                          | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT |         | TELEPHONE    |        | DATE                  |             |
| Glenn Grieb<br>Project Manager         |                    |   |            |        |                          |  |         | 732 572-4743 |        | 13 10 22              |             |
| TYPED OR PRINTED                       |                    |   |            |        |                          | AREA CODE  |         | NUMBER       |        | YEAR MO DAY           |             |

COMMENTS AND EXPLANATIONS OF ANY VIOLATIONS

(REFERENCE ALL ATTACHMENTS HERE)



**NJPDES BIOMONITORING REPORT FORM-ACUTE TOXICITY**



Permit Number #: Permit Equivalent      DSN: 001

Facility name:                                      Kin-Buc Landfill

Facility address:                                  383 Meadow Road  
Edison, NJ

Facility contact person:                        Glen Grieb  
Phone number:                                    732.561.7600

Acute toxicity laboratory:                      QC Laboratories Aquatic Toxicology Division  
60 James Way, Unit #6  
Southampton, PA 18966

/NELAC certification number:                PA034

**Test Specifications:**

Effluent Type: Final

Test Type: Modified static renewal (24-hour)

**Test Results:**

Test Start: 09/10/13 14:00

Test End: 09/14/13 13:55

Test endpoint: LC50

Highest percent mortality in top test concentration: 20.0%

**REPORT THIS VALUE..... >100%**

95% Confidence Interval: NA

Test organism:                      Mysid Shrimp                      Mysidopsis bahia  
common name                      scientific name

**Quality Control Summary**

Control Mortality (%): 0.0%

Temperature maintained within 20 +/- 1 °C? Yes

Dissolved Oxygen Levels always greater than 40% saturation? Yes

Two or more concentrations exhibit a trend deviation? No

**Certification:**

Accuracy of report certified by: \_\_\_\_\_

Robert A. Martino  
Laboratory Director

9/20/13  
Date

**Test Organism Data:**

Test organism source: Marisco

**Test Organism Acclimation:**

Is the culture water and test dilution water the same, and are the culture water temperature and dilution water temperature identical? No

Mysid, Daphnids and Cladocerans:

Initial number of organisms: 150  
 Test organism age at start of test (days): 4 days  
 Culture water source: 40 Fathoms  
 Culture water salinity: 25 ppt  
 Culture water temperature: 25°C  
 Dilution water source: In-house  
 Dilution water salinity upon collection: 24.3 ppt  
 Dilution water temperature upon collection: NA  
 Number of mortalities: < 5%

**Test Design:**

Number of effluent test concentrations: 5  
 Number of replicates/test concentration: 4  
 Number of test organisms/replicate: 5  
 Volume of liquid in test chambers (liters): 0.20  
 Flow-through bioassay exchange rate (cycles/day): NA

**Effluent sampling:**

Plant sampling location: Final effluent just before weir.  
 Effluent type: Final.  
 Discharge: Continuous  
 Effluent sample type: 24 hour composite

| Effluent Sample Collection |             |               |             | Initial Parameters<br>In Laboratory |                  |             |              |                 | Use in Toxicity<br>Tests |                | Holding<br>Time    |
|----------------------------|-------------|---------------|-------------|-------------------------------------|------------------|-------------|--------------|-----------------|--------------------------|----------------|--------------------|
| <i>Beginning</i>           |             | <i>Ending</i> |             | <i>temp</i>                         |                  | <i>d.o</i>  | <i>Cond</i>  | <i>Chlorine</i> |                          |                | <i>(first use)</i> |
| <i>date</i>                | <i>time</i> | <i>date</i>   | <i>time</i> | <i>° C</i>                          | <i>pHi / pHs</i> | <i>mg/L</i> | <i>umhos</i> | <i>ppm</i>      | <i>date(s)</i>           | <i>time(s)</i> | <i>hours</i>       |
| 09/08/13                   | 8:00        | 09/09/13      | 8:00        | 5.0                                 | 8.47             | 8.7         | 9800         | < 0.1           | 09/10/13                 | 14:00          | 30:00              |
| 09/09/13                   | 11:00       | 09/10/13      | 11:00       | 5.0                                 | 8.38             | 8.4         | 9850         | < 0.1           | 09/11/13                 | 14:15          | 27:15              |
| 09/10/13                   | 12:00       | 09/11/13      | 12:00       | 5.0                                 | 8.37             | 8.4         | 9860         | < 0.1           | 09/12/13                 | 14:10          | 27:55              |
| 09/11/13                   | 14:15       | 09/12/13      | 14:15       | 5.0                                 | 8.55             | 8.9         | 10440        | <0.1            | 09/13/13                 | 14:05          | 23:50              |
|                            |             |               |             |                                     |                  |             |              |                 |                          |                |                    |

Testing location: QC Laboratories

## Effluent Sample Adjustments

Were any salinity adjustments made? Yes

If yes, specify the source of sea salts, brine or water used: Dry 40 Fathoms (biotechnical grade)

Were any pH adjustments made? No.

## -----pH / Chlorine Adjustment-----

| Sample Used | Volume Adjusted | pH prior to Salting | Salinity ppt | pH after Salting | ml's 0.2N HCl Used | pH after Adjustment | TRC sample | Amt. STS added (mgs) | TRC after Addition |
|-------------|-----------------|---------------------|--------------|------------------|--------------------|---------------------|------------|----------------------|--------------------|
|             |                 |                     |              |                  |                    |                     |            |                      |                    |
|             |                 |                     |              |                  |                    |                     |            |                      |                    |
|             |                 |                     |              |                  |                    |                     |            |                      |                    |
|             |                 |                     |              |                  |                    |                     |            |                      |                    |

Was the effluent sample filtered in any manner? No

If yes, please specify the mesh size:

Were any adjustments to the level of chlorine made? No.

If yes, specify the dechlorination agent used and the amount of reagent used: NA

Specify the chlorine levels prior to and after addition of the reagent: See data above.

Was an additional control included in the test containing the dechlorination agent? Yes, added to Control B.

## Dilution Water:

Effluent receiving water: Raritan River.

Dilution water source: 40 fathoms

If a substitute dilution water was used, had its use been approved by the NJDEP in the acute methodology questionnaire?

Collection location: In-house

Collection date(s): NA

0 hour 24 hour 48 hour 72 hour 96 hour

LC50/EC50 (% effluent) >100% >100% >100% >100% >100%

Calculation method: No measurable acute toxicity.

Is the calculated LC50/EC50 valid according to the specifications of the method used? Yes

## Miscellaneous:

Were any exposure chambers aerated during the test? No

If yes, specify concentrations and duration, including the lowest percent saturation reached prior to aeration and at what time:

Were the test organisms observed for appearance and behavior at least daily? Yes

## Physical/Chemical Data

| MHFW Dilution Water    |                        |                      |                     | 100% Effluent          |                        |                      |                     |
|------------------------|------------------------|----------------------|---------------------|------------------------|------------------------|----------------------|---------------------|
| <i>Sample Sequence</i> | <i>Alkalinity mg/L</i> | <i>Hardness mg/L</i> | <i>Ammonia* ppm</i> | <i>Sample Sequence</i> | <i>Alkalinity mg/L</i> | <i>Hardness mg/L</i> | <i>Ammonia* ppm</i> |
| D001                   | 108                    | NA                   | NA                  | E001                   | 469                    | NA                   | < 0.1               |
|                        |                        |                      |                     | E002                   | 456                    | NA                   | < 0.1               |
|                        |                        |                      |                     | E003                   | 379                    | NA                   | < 0.1               |
|                        |                        |                      |                     | E004                   | 422                    | NA                   | < 0.1               |
|                        |                        |                      |                     |                        |                        |                      |                     |

\*Ammonia analysis performed by QC Laboratories Analytical Laboratory, Certification PA166, by method SM 20th ed. 4500-NH3D

\*\*Please note that the ammonia analysis is performed on composite samples unless otherwise noted.

## Comments

Additional Comments:

**Bioassay Deliverables Check List**

|      |   | Yes                                 | No                                  | NA                                  | Reviewer |
|------|---|-------------------------------------|-------------------------------------|-------------------------------------|----------|
| 1.0  | Dates of testing match raw data   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | TG       |
| 2.0  | Facility Name, NPDES Number, DSN Number Complete                            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |          |
| 3.0  | Control mortality less than 10% for acutes or less than 20% for chronics    | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |          |
| 4.0  | Temperature maintained within 1°C for acute and chronic studies             | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |          |
| 5.0  | Dissolved oxygen levels always greater than 40% saturation                  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |          |
| 6.0  | Test design complete  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |          |
| 7.0  | Effluent sampling section complete and holding times are less than 36 hours | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |          |
| 8.0  | Dilution water sampling section complete                                    | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |          |
| 9.0  | Chain of custody present  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |          |
| 10.0 | Test results complete and match statistics pages (if applicable)            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |          |
| 11.0 | For chronics are PMSD values within acceptable ranges for given species*    | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |          |
| 12.0 | Two or more concentrations exhibit a trend deviation                        | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |          |
| 13.0 | SRT Data attached and current   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |          |
| 14.0 | Approval for variance   | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |          |
| 15.0 | Lims Number at bottom center of page matches report number                  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |          |
| 16.0 | Serial Number correct   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |          |

**\* Acceptable PMSD Values**

| Test Method        | Endpoint     | 10th PMSD | 90th PMSD |
|--------------------|--------------|-----------|-----------|
| Fathead Minnow     | Growth       | 12        | 30        |
| Ceriodaphnia dubia | Reproduction | 13        | 47        |
| Sheepshead Minnow  | Growth       | 6         | 23        |
| Mysid Shrimp       | Growth       | 11        | 37        |

QA Review:

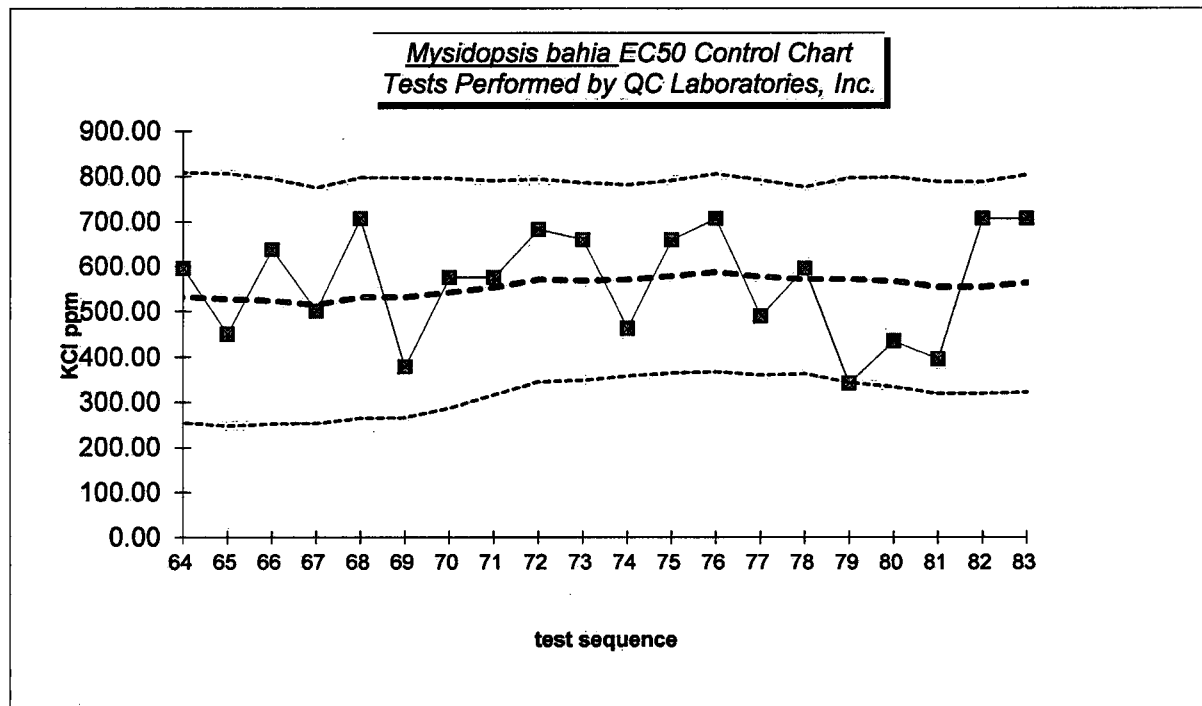
Michelle Jadiso

Date:

09/27/13

Printed Name:

☒ Michelle Jadiso☐ Marlyse M. Burlingame**This report shall not be reproduced except in full, without written approval of QC Laboratories.**



| Date       | test number | LC50<br>ppm | MEAN   | UCL 2SD | LCL 2SD | STDV | STDVX2 |
|------------|-------------|-------------|--------|---------|---------|------|--------|
| 10/11/2011 | 64          | 594.60      | 531.22 | 808.24  | 254.19  |      |        |
| 1/10/2012  | 65          | 450.63      | 526.96 | 806.29  | 247.62  |      |        |
| 4/10/2012  | 66          | 637.28      | 523.46 | 794.96  | 251.97  |      |        |
| 7/31/2012  | 67          | 500.33      | 514.33 | 775.31  | 253.35  |      |        |
| 9/5/2012   | 68          | 707.11      | 530.74 | 797.09  | 264.39  |      |        |
| 10/9/2012  | 69          | 378.25      | 531.20 | 796.40  | 265.99  |      |        |
| 11/6/2012  | 70          | 574.35      | 541.49 | 795.86  | 287.13  |      |        |
| 12/4/2012  | 71          | 574.35      | 553.01 | 790.00  | 316.01  |      |        |
| 1/8/2013   | 72          | 683.02      | 569.48 | 793.55  | 345.41  |      |        |
| 2/7/2013   | 73          | 659.75      | 567.11 | 786.00  | 348.22  |      |        |
| 3/5/2013   | 74          | 462.71      | 569.84 | 781.63  | 358.05  |      |        |
| 4/9/2013   | 75          | 659.75      | 577.44 | 790.75  | 364.14  |      |        |
| 5/7/2013   | 76          | 707.11      | 586.52 | 805.89  | 367.15  |      |        |
| 6/4/2013   | 77          | 489.11      | 575.62 | 791.40  | 359.84  |      |        |
| 7/9/2013   | 78          | 594.60      | 569.99 | 777.03  | 362.96  |      |        |
| 8/6/2013   | 79          | 341.51      | 570.05 | 796.70  | 343.40  |      |        |
| 8/28/2013  | 80          | 435.28      | 566.29 | 798.94  | 333.64  |      |        |
| 8/28/2013  | 81          | 395.26      | 553.29 | 787.94  | 318.65  |      |        |
| 9/4/2013   | 82          | 707.11      | 553.29 | 787.94  | 318.65  |      |        |
| 9/4/2013   | 83          | 707.11      | 562.63 | 803.36  | 321.90  |      |        |
|            |             | CV          | 21.4%  |         |         |      |        |





## EPA TEST METHOD 2007.0-ACUTE TESTING WITH AMERICAMYSIS BAHIA

Study Number: 4758098095 Client: Km-Buc  
 Protocol: EPA/821-R-02-012 NJ Water Bath/Incubator: 26  
 Date Initiated: 9-10-13 Time Initiated: 1400  
 Date Terminated: 9-14-13 Time Terminated: 1355  
 Test Duration: 24-hour 48-hour 72-hour 96-hour Other:  
 Test Type: 6-hour static renewal 24-hour static renewal static-no renewal  
 flow-through/dilutor used: other:  
 Test Material: Effluent Receiving Water Non Contact/Contact Cooling Water  
 Pure Compound: SRT Solution / Lot #:  
 Other:  
 Dilution Water: Receiving Waters: Synthetic / Lot #: Salt / SWL 072013  
 Test Concentrations: control 20 40 60 80 100 1 2 3 4 5 6 7 8 1 units  
 Salt Added to Effluent (Y) N Test Salinity: 25 ppt Brand of Artificial Salts Used: 40-Fathoms Other:  
 Test Volume(ml's): 100 200 250 500 1000 other:  
 Number of Replicates: 2 4 5 other: Number of Organisms / Replicate: 5 10 other:  
 Test Temperature (°C): 20 22 25 other:  
 Test Species: Mysid Shrimp Mysidopsis bahia  
 Source: In house Commercial Supplier: MBL  
 Lot Number: MYNBL090613 Age at test initiation: 7 days Age range: 24 hr  
 Original Number of Organisms Acclimated: used @ receipt  
 Acclimation Initiated: Date: Time: Tl °C: pH<sub>i</sub> D.O.<sub>i</sub> Sal.<sub>i</sub>  
 Acclimation Terminated: Date: Time: Tf °C: pH<sub>f</sub> D.O.<sub>f</sub> Sal.<sub>f</sub>  
 Time Organisms remained in 100% Dilution Water: % Dead:  
 Time Organisms Added to Test Chambers:  
 Comments:

VERIFICATION OF LABORATORY DIRECTOR

DATE



## MORTALITY/BEHAVIORAL OBSERVATIONS INVERTEBRATE TESTS

Study Number: 4758095

| REP          | CONC<br>(%) | OBSERVATION TIME FROM T=0 |     |                 |     |                 |     |                 |     |                 |     |
|--------------|-------------|---------------------------|-----|-----------------|-----|-----------------|-----|-----------------|-----|-----------------|-----|
|              |             | 0 hours                   |     | <u>24</u> hours |     | <u>48</u> hours |     | <u>72</u> hours |     | <u>96</u> hours |     |
|              |             | alive                     | obs | alive           | obs | alive           | obs | alive           | obs | alive           | obs |
| 1A           | Control     | 5                         | N   | 5               | N   | 5               | N   | 5               | N   | 5               | N   |
| 1B           |             |                           |     |                 |     |                 |     |                 |     |                 |     |
| 1C           |             |                           |     |                 |     |                 |     |                 |     |                 |     |
| 1D           |             |                           |     |                 |     |                 |     |                 |     |                 |     |
| 2A           |             |                           |     |                 |     |                 |     |                 |     |                 |     |
| 2B           | <u>20</u>   |                           |     |                 |     |                 |     |                 |     |                 |     |
| 2C           |             |                           |     |                 |     |                 |     |                 |     |                 |     |
| 2D           |             |                           |     |                 |     |                 |     |                 |     |                 |     |
| 3A           |             |                           |     |                 |     |                 |     |                 |     |                 |     |
| 3B           | <u>40</u>   |                           |     |                 |     |                 |     |                 |     |                 |     |
| 3C           |             |                           |     |                 |     |                 |     |                 |     |                 |     |
| 3D           |             |                           |     |                 |     |                 |     |                 |     |                 |     |
| 4A           |             |                           |     |                 |     |                 |     |                 |     |                 |     |
| 4B           | <u>60</u>   |                           |     |                 |     |                 |     |                 |     |                 |     |
| 4C           |             |                           |     |                 |     |                 |     |                 |     |                 |     |
| 4D           |             |                           |     |                 |     |                 |     | ↓               | ↓   |                 |     |
| 5A           |             |                           |     |                 |     |                 |     |                 |     |                 |     |
| 5B           | <u>80</u>   |                           |     |                 |     |                 |     | 4               | ID  | 4               | ID  |
| 5C           |             |                           |     |                 |     |                 |     | 5               | N   | 5               | N   |
| 5D           |             |                           |     |                 |     |                 |     | 5               | N   | 5               | N   |
| 6A           |             |                           |     |                 |     |                 |     | 4               | ID  | 4               | ID  |
| 6B           | <u>100</u>  |                           |     |                 |     |                 |     | 5               | N   | 4               | ID  |
| 6C           |             |                           |     |                 |     |                 |     | 5               | N   | 3               | 2D  |
| 6D           |             | ↓                         | ↓   | ↓               | ↓   | ↓               | ↓   | 5               | N   | 4               | ID  |
| 7A           |             |                           |     |                 |     |                 |     |                 |     |                 |     |
| 7B           |             |                           |     |                 |     |                 |     |                 |     |                 |     |
| 7C           |             |                           |     |                 |     |                 |     |                 |     |                 |     |
| 7D           |             |                           |     |                 |     |                 |     |                 |     |                 |     |
| 8A           |             |                           |     |                 |     |                 |     |                 |     |                 |     |
| 8B           |             |                           |     |                 |     |                 |     |                 |     |                 |     |
| 8C           |             |                           |     |                 |     |                 |     |                 |     |                 |     |
| 8D           |             |                           |     |                 |     |                 |     |                 |     |                 |     |
| Signature    |             | <u>AS</u>                 |     | <u>AS</u>       |     | <u>AS</u>       |     | <u>AS</u>       |     | <u>CBE</u>      |     |
| Date         |             | <u>9-10-13</u>            |     | <u>9-11-13</u>  |     | <u>9-12-13</u>  |     | <u>9-13-13</u>  |     | <u>9-14-13</u>  |     |
| Renewal Time |             | <u>1400</u>               |     | <u>1415</u>     |     | <u>1410</u>     |     | <u>1405</u>     |     | <u>1355</u>     |     |
| Sample Used  |             |                           |     |                 |     |                 |     |                 |     |                 |     |

### Observations:

D Dead: no appendage movement  
F Fed

C Cannibalized  
I Immobile

### REMARKS

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Reviewed by: \_\_\_\_\_

Page 2 of 3



## Physical/Chemical Parameters Sheet

Study Number: 4758095

**T=0/24 Hrs**

|  |         | temp<br>°C | do<br>mg/l | pH<br>units | Sal<br>ppt | con<br>umhos (x100) |
|--|---------|------------|------------|-------------|------------|---------------------|
| control  | initial | 21.0       | 8.5        | 8.14        | 24.0       |                     |
|  | final   | 21.0       | 7.2        | 8.07        | 24.3       |                     |
| 20   | initial | 21.0       | 8.5        | 8.30        | 24.6       |                     |
|  | final   | 21.0       | 7.3        | 8.34        | 25.1       |                     |
| 40   | initial | 21.0       | 8.5        | 8.37        | 25.1       |                     |
|  | final   | 21.0       | 7.4        | 8.51        | 25.6       |                     |
| 60   | initial | 21.0       | 8.7        | 8.40        | 25.7       |                     |
|  | final   | 21.0       | 7.5        | 8.59        | 26.2       |                     |
| 80   | initial | 21.0       | 8.6        | 8.42        | 26.2       |                     |
|  | final   | 21.0       | 7.4        | 8.62        | 26.4       |                     |
| 100  | initial | 21.0       | 8.6        | 8.42        | 26.5       |                     |
|  | final   | 21.0       | 7.5        | 8.62        | 26.9       |                     |
|  | initial |            |            |             |            |                     |
|  | final   |            |            |             |            |                     |
| Initials AS AS f comments<br>Date 9-10-13 9-11-13<br>Time 1400 1415<br>Therm. ID CP139 CP142 |         |            |            |             |            |                     |

**T=24/48 Hrs**

|  |         | temp<br>°C | do<br>mg/l | pH<br>units | Sal<br>ppt | con<br>umhos (x100) |
|--|---------|------------|------------|-------------|------------|---------------------|
| control  | initial | 21.0       | 7.8        | 8.34        | 23.8       |                     |
|  | final   | 21.0       | 7.8        | 8.25        | 23.9       |                     |
| 20   | initial | 21.0       | 7.9        | 8.50        | 24.7       |                     |
|  | final   | 21.0       | 7.9        | 8.48        | 24.9       |                     |
| 40   | initial | 21.0       | 7.9        | 8.55        | 24.6       |                     |
|  | final   | 21.0       | 7.8        | 8.60        | 25.2       |                     |
| 60   | initial | 21.0       | 7.9        | 8.57        | 24.9       |                     |
|  | final   | 21.0       | 7.7        | 8.64        | 25.5       |                     |
| 80   | initial | 21.0       | 8.0        | 8.57        | 25.0       |                     |
|  | final   | 21.0       | 7.7        | 8.64        | 25.9       |                     |
| 100  | initial | 21.0       | 7.8        | 8.57        | 25.3       |                     |
|  | final   | 21.0       | 7.6        | 8.60        | 26.0       |                     |
|  | initial |            |            |             |            |                     |
|  | final   |            |            |             |            |                     |
| Initials AS AS f comments<br>Date 9-11-13 9-12-13<br>Time 1415 1416<br>Therm. ID CP142 CP139 |         |            |            |             |            |                     |

**T=48/72 Hrs**

|  |         | temp<br>°C | do<br>mg/l | pH<br>units | Sal<br>ppt | con<br>umhos (x100) |
|--|---------|------------|------------|-------------|------------|---------------------|
| control  | initial | 21.0       | 8.5        | 8.50        | 24.5       |                     |
|  | final   | 21.0       | 7.5        | 8.20        | 24.8       |                     |
| 20   | initial | 21.0       | 8.7        | 8.30        | 24.6       |                     |
|  | final   | 21.0       | 7.6        | 8.29        | 24.9       |                     |
| 40   | initial | 21.0       | 8.6        | 8.22        | 25.0       |                     |
|  | final   | 21.0       | 7.5        | 8.35        | 25.5       |                     |
| 60   | initial | 21.0       | 8.6        | 8.14        | 25.3       |                     |
|  | final   | 21.0       | 7.5        | 8.35        | 25.9       |                     |
| 80   | initial | 21.0       | 8.6        | 8.07        | 25.7       |                     |
|  | final   | 21.0       | 7.5        | 8.31        | 26.3       |                     |
| 100  | initial | 21.0       | 8.2        | 8.01        | 26.1       |                     |
|  | final   | 21.0       | 7.6        | 8.21        | 26.9       |                     |
|  | initial |            |            |             |            |                     |
|  | final   |            |            |             |            |                     |
| Initials AS AS f comments<br>Date 9-12-13 9-13-13<br>Time 1410 1405<br>Therm. ID CP139 CP139 |         |            |            |             |            |                     |

**T=72/96 Hrs**

|   |         | temp<br>°C | do<br>mg/l | pH<br>units | Sal<br>ppt | con<br>umhos (x100) |
|---|---------|------------|------------|-------------|------------|---------------------|
| control   | initial | 21.0       | 7.8        | 8.48        | 24.3       |                     |
|   | final   | 21.0       | 7.5        | 8.12        | 25.3       |                     |
| 20  | initial | 21.0       | 8.0        | 8.52        | 24.3       |                     |
|   | final   | 21.0       | 7.5        | 8.15        | 25.4       |                     |
| 40  | initial | 21.0       | 8.0        | 8.52        | 24.2       |                     |
|   | final   | 21.0       | 7.6        | 8.18        | 25.5       |                     |
| 60  | initial | 21.0       | 8.0        | 8.52        | 24.2       |                     |
|   | final   | 21.0       | 7.6        | 8.21        | 25.7       |                     |
| 80  | initial | 21.0       | 8.0        | 8.52        | 24.2       |                     |
|   | final   | 21.0       | 7.6        | 8.28        | 25.8       |                     |
| 100   | initial | 21.0       | 7.8        | 8.52        | 24.3       |                     |
|   | final   | 21.0       | 7.5        | 8.33        | 26.1       |                     |
|   | initial |            |            |             |            |                     |
|   | final   |            |            |             |            |                     |
| Initials AS CBE f comments<br>Date 9-13-13 9-14-13<br>Time 1415 1355<br>Therm. ID CP139 CP135 |         |            |            |             |            |                     |

Reviewed by: \_\_\_\_\_

Study: 4758095

### RANDOMIZATION BOARD TEMPLATES 6x4

Randomization Template 6x4-A

|    |    |    |    |
|----|----|----|----|
| 6A | 3A | 4C | 3B |
| 4A | 3D | 2C | 4D |
| 1C | 6D | 2A | 6B |
| 4A | 6C | 5D | 3C |
| 5A | 2B | 2D | 1B |
| 5C | 1A | 1D | 4B |

Randomization Template 6x4-B

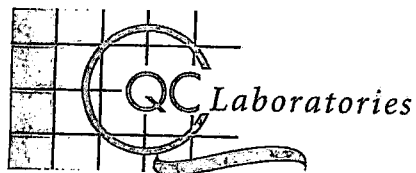
|    |    |    |    |
|----|----|----|----|
| 5A | 1D | 2A | 3C |
| 6B | 1C | 4A | 5D |
| 6C | 2B | 3D | 6D |
| 4B | 6A | 3B | 5B |
| 4D | 3A | 2D | 1B |
| 2C | 1A | 5C | 4C |

Randomization Template 6x4-C

|    |    |    |    |
|----|----|----|----|
| 1B | 2B | 4A | 6C |
| 6B | 1A | 4C | 5A |
| 3B | 3D | 6A | 4B |
| 1C | 2D | 4D | 2A |
| 5B | 2C | 3A | 1D |
| 6D | 5C | 3C | 5D |

Randomization Template 6x4-D

|    |    |    |    |
|----|----|----|----|
| 4A | 2B | 6C | 1B |
| 6A | 2C | 5B | 3D |
| 3B | 1A | 2A | 5A |
| 5D | 1D | 3A | D  |
| 2D | 4B | 1C | 3C |
| 4C | 5C | 6B | 6D |



## ORGANISM LOG-IN SHEET

Date / Time of Receipt: 9-10-13 / 1030

Person Accepting: Tara Gallagher

Organism Source: MBL

Species: Mysisidopsis bahia

Date Born / Age / Lot Number: 9-6-13 / 4 days / MYMBL090613, 9-3-13 / 7 days / MYMBL090313

Percent Mortality at Receipt: <1%, <1%

Organism Stress at Receipt: ☒ normal stressed due to: temp low do other

Initial Measurements at Organism Receipt:

Temp (°C): 21.9, 21.9

Salinity (ppt): 19.7, 19.5

DO (mg/L): 12.7, 12.0

pH: 7.64, 7.56

Alkalinity (mg/L):

Hardness (mg/L):

Designated Culture Tank:

Designated Study(s):

Are Parameters within 10% of Intended Culture System:

Date / Time Organisms added to Culture System:

Check for Parasites: + / ☒

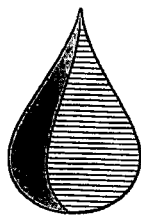
Check for Fungal or Bacterial Disease: + / ☒

Were any Prophylactic Treatments used: ☒ N Y (explain):

Comments:

note: attach copy of supplier data sheet to this log

1205 Industrial Blvd., P.O. Box 514, Southampton, PA 18966-0514 Phone: 215-355-3900 Fax: 215-355-7231



**MARINCO  
BIOASSAY  
LABORATORY**  
The Aquatic Toxicology Specialists

NELAP Certification # E84191

## Shipment Record

State of Florida Aquaculture Certificate Number AQ0668007

Shipping Date: 9/9/13

Ship to: QC Labs

P.O. No: \_\_\_\_\_

| Species                    | Quantity | Age     | Brood/Lot Number | Temp. (°C) | pH (S.U.) | Salinity (‰)  |
|----------------------------|----------|---------|------------------|------------|-----------|---------------|
| <i>Mysidopsis bahia</i>    | 800      | 3 Days  | MS130906         | 25         | 7.9       | 20            |
|                            | 850      | 60 Days | MS130903         | 25         | 7.9       | 20            |
| <i>Menidia beryllina</i>   |          |         |                  |            |           |               |
|                            |          |         |                  |            |           |               |
|                            |          |         |                  |            |           | Hardness mg/L |
| <i>Cyprinella leedsi</i>   |          |         |                  |            |           |               |
|                            |          |         |                  |            |           |               |
| <i>Pimephales promelas</i> | 1300     | 24 hrs  | FM130908-1500    | 25         | 7.8       | 80            |
|                            |          |         |                  |            |           |               |
| <i>Ceriodaphnia dubia</i>  |          |         |                  |            |           |               |
|                            |          |         |                  |            |           |               |
| <i>Daphnia magna</i>       |          |         |                  |            |           |               |
|                            |          |         |                  |            |           |               |
| YCT                        |          |         |                  |            |           |               |
| <i>P. subcapitata</i>      |          |         |                  |            |           |               |

Packed by: PM

Shipped Via: Fed Ex

Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Thank you for your order.



# QC Laboratories

## AQUATIC TOXICOLOGY LAB - CHAIN OF CUSTODY

Study Number: 4758095Facility Name or Code: Km - BucTest Type: ☒ Acute ☐ Chronic ☐ Sediment ☐ Pure Compound ☐ OtherSample Number: ☒ D001 ☐ D002 ☐ D003 ☐ E001 ☐ E002 ☐ E003 ☐ E004 ☐ E005 ☐ E006If sample is comprised of splits, will the splits be homogenized prior to use:  
(note: if split, assign A, B, C...to sample number—add Z if samples are homogenized.)

Splits to be homogenized:

Description of Sample: ☒ Effluent ☐ Non-Contact Cooling Water ☐ Contact Cooling Water  
☒ Dilution Waters ☐ Groundwater/pump and treat ☐ Other:Location of Sampling: ☐ Final (post treatment) ☐ Final-Prechlorinated ☐ Final-Chlorinated ☐ Outfall Outlet  
☐ Receiving Waters ☐ Other:Sample type: ☐ Grab ☐ 24 Hour Composite ☐ \_\_\_\_\_ Hour Composite  
☐ Time Proportional ☐ Flow Proportional ☐ Refrigerated/Iced in Field

Sample Collection:

Date/Time Initiated:

Date/Time Terminated:

Was sampler chain-of-custody seal intact at sample retrieval: ☐ Yes ☐ No

Volume of Sample: \_\_\_\_\_ Liters / Gallons

Container Type: ☐ FDA Grade Plastic ☐ Glass ☐ Stainless Steel

Storage and Transport Conditions:

☐ Iced/Cooler

Temp. (°C) upon collection: \_\_\_\_\_

☐ Field Collected/Transported to Lab☐ Overnight Courier

|                          |      |      |              |      |      |
|--------------------------|------|------|--------------|------|------|
| Relinquished by Sampler: | Date | Time | Received By: | Date | Time |
| Relinquished by:         | Date | Time | Received By: | Date | Time |
| Relinquished by:         | Date | Time | Received By: | Date | Time |

Condition of Sample upon Receipt:

☐ Contained☐ Accepted☐ Compromised / Explain below☐ Rejected / Explain below

Sample Refrigerated (date/time/sig.):

\* SWLG072613

### Sample Data and Use

| Initial Sample Data        |      |             |            |           | Dates used in Toxicity Test |         | Sample   | Sample Terminated |      |
|----------------------------|------|-------------|------------|-----------|-----------------------------|---------|----------|-------------------|------|
| temp (°C)                  | pH   | D.O. (mg/L) | Cond./Sal* | TRC (ppm) | Date(s)                     | Time(s) | Split ID | Date              | Time |
| 20.9                       | 8.10 | 7.7         | 37.4       | 60.1      |                             |         |          |                   |      |
| Notes: salinity - 23.6 ppt |      |             |            |           |                             |         |          |                   |      |

\*Conductivity measured in umhos; salinity measured in o/oo

Sample Manipulations:

☒ Salted☐ pH Adjusted

mL's 0.1 N HCL \_\_\_\_\_

mL's 0.1 N NaOH \_\_\_\_\_

☐ Final pH \_\_\_\_\_☐ Aerated/Due to:☐ Supersaturation☐ D.O. < 40% of Sat. / final D.O. after aeration: \_\_\_\_\_ mg/L☐ Dechlorinated

\_\_\_\_\_ mgs anhydrous sodium thiosulfate used per liter (show math below or back)

Comments:





1205 Industrial Blvd. Phone: 215-355-3900  
Southampton, PA 18966-0514 Fax: 215-355-7231

# CHAIN OF CUSTODY

Page 1 of 1

Bill to/Report to: (if different)

Client/Acct. No. A50032/KIN-BUC

Address LAMPFILL

Sampling Site Address: (if different)

City/State/Zip EDISON, NJ

Phone/Fax

P.O. No.

Client Contact GLENN G.

QC Contact

Lab LIMS No:

4758095

## MATRIX CODES

DW: DRINKING WATER  
GW: GROUND WATER  
WW: WASTEWATER  
SO: SOIL  
SL: SLUDGE  
OIL: OIL  
SOL: NON SOIL SOLID  
MI: MISCELLANEOUS  
X: OTHER

## LAB USE ONLY:

#      Ascorbic/HCl Vials #      HCl Vials  
#      Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>  
#      Na OH/Zn acetate pH  
#      HNO<sub>3</sub> pH  
#      H<sub>2</sub>SO<sub>4</sub> pH  
#      NaOH pH  
#      Unpreserved  
#      Hcl pH  
#      Temp control ID#

## ANALYSIS REQUESTED

Field pH, Temp (C or F),  
DO, Cl<sub>2</sub>, S. Cond. etc.

## PROJECT

## Collection

G  
R  
A  
B

C  
O  
M  
P

Matrix  
Code

## Number of Containers

Total H<sub>2</sub>SO<sub>4</sub> HCl HNO<sub>3</sub> NaOH ZnAcetate Unpreserved Bact

## FIELD ID

Date

Military Time

EFFLUENT DISCHARGE

9-8-13

0800

9-9-13

0800

X

1

BIOASSAY

SAMPLED BY: (Name/Company)

AS/OC

Verbal/fax data due: / /

Hardcopy due: / /

Report Format: ☐ Standard ☐ Forms

☐ Standard + QC ☐ NJ Reduced ☐ Disk

Please call for pricing and availability on rush (<14-21 day) turnaround and on all but standard format.

Field Parameters Analyzed By:

Sig:

Date/Time:

SAMPLE CUSTODY EXCHANGES MUST BE DOCUMENTED BELOW. USE FULL LEGAL SIGNATURE, DATE AND MILITARY TIME (24 HOUR CLOCK, I.E. 8AM IS 0800, 4 PM IS 1600)

RELINQUISHED BY SAMPLER

1 [Signature]

DATE

9-9-13

TIME

1630

RECEIVED BY

1 Cadern 32

DATE

9-9-13

TIME

1630

DELIVERY METHOD: ☒ QC COURIER ☐ CLIENT

☐ UPS ☐ FEDEX ☐ OTHER

Custody Seal Number

99-13

RELINQUISHED BY

2 [Signature]

DATE

9-10-13

TIME

700

RECEIVED BY

2 [Signature]

DATE

9-10-13

TIME

700

COMMENTS:

RELINQUISHED BY

3

DATE

TIME

RECEIVED BY

3

DATE

TIME

RELINQUISHED BY

4

DATE

TIME

RECEIVED BY

4

DATE

TIME

RELINQUISHED BY

5

DATE

TIME

RECEIVED BY

5

DATE

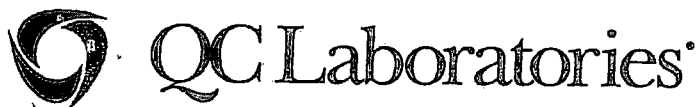
TIME

Hazardous: yes / no

30C ATLAS / UED

For example to aid completion, see reverse side.

FINAL REPORT



## AQUATIC TOXICOLOGY LAB - CHAIN OF CUSTODY

Study Number: 4958095Facility Name or Code: Kim-BucTest Type: ☒ Acute ☐ Chronic ☐ Sediment ☐ Pure Compound ☐ OtherSample Number: ☐ D001 ☐ D002 ☐ D003 ☒ E001 ☐ E002 ☐ E003 ☐ E004 ☐ E005 ☐ E006If sample is comprised of splits, will the splits be homogenized prior to use:  
(note: if split, assign A, B, C...to sample number--add Z if samples are homogenized.)

Splits to be homogenized:

Description of Sample: ☒ Effluent ☐ Non-Contact Cooling Water ☐ Contact Cooling Water  
☐ Dilution Waters ☐ Groundwater/pump and treat ☐ Other:Location of Sampling: ☒ Final (post treatment) ☐ Final-Prechlorinated ☐ Final-Chlorinated ☐ Outfall Outlet  
☐ Receiving Waters ☐ Other:Sample type: ☐ Grab ☒ 24 Hour Composite ☐ \_\_\_\_\_ Hour Composite  
☐ Time Proportional ☐ Flow Proportional ☐ Refrigerated/Iced in Field

Sample Collection:

Date/Time Initiated:

Date/Time Terminated:

Was sampler chain-of-custody seal intact at sample retrieval: ☐ Yes ☐ No

Volume of Sample: \_\_\_\_\_ Liters / Gallons

Container Type: ☐ FDA Grade Plastic ☐ Glass ☐ Stainless Steel

Storage and Transport Conditions:

☐ Iced/Cooler

Temp. (°C) upon collection: \_\_\_\_\_

☐ Field Collected/Transported to Lab☐ Overnight Courier

|                          |      |      |                             |      |      |
|--------------------------|------|------|-----------------------------|------|------|
| Relinquished by Sampler: | Date | Time | Received By: <u>A Smith</u> | Date | Time |
| Relinquished by:         | Date | Time | Received By:                | Date | Time |
| Relinquished by:         | Date | Time | Received By:                | Date | Time |

Condition of Sample upon Receipt: ☒ Contained ☒ Accepted ☐ Compromised / Explain below ☐ Rejected / Explain below

Sample Refrigerated (date/time/sig.):

| Initial Sample Data                |      |             |            |           | Sample Data and Use         |         |                 |                   |      |
|------------------------------------|------|-------------|------------|-----------|-----------------------------|---------|-----------------|-------------------|------|
| temp (°C)                          | pH   | D.O. (mg/L) | Cond./Sal* | TRC (ppm) | Dates used in Toxicity Test |         | Sample Split ID | Sample Terminated |      |
|                                    |      |             |            |           | Date(s)                     | Time(s) |                 | Date              | Time |
| 5.0                                | 8.47 | 8.7         | 9800       | 6.1       | 9.10.13                     | 1400    |                 | 9.11.13           | 800  |
| Notes:                             |      |             |            |           |                             |         |                 |                   |      |
|                                    |      |             |            |           |                             |         |                 |                   |      |
|                                    |      |             |            |           |                             |         |                 |                   |      |
| *Conductivity measured in µmhos/cm |      |             |            |           |                             |         |                 |                   |      |

\*Conductivity measured in umhos; salinity measured in o/oo

Sample Manipulations:

☒ Sealed☐ pH Adjusted

mL's 0.1 N HCL \_\_\_\_\_

mL's 0.1 N NaOH \_\_\_\_\_

☐ Final pH \_\_\_\_\_☐ Aerated/Due to:☐ Supersaturation☐ D.O. < 40% of Sat. / final D.O. after aeration: \_\_\_\_\_ mg/L☐ Dechlorinated

\_\_\_\_\_ mgs anhydrous sodium thiosulfate used per liter (show math below or back)

Comments:



## CHAIN OF CUSTODY

Page 1 of 1

1205 Industrial Blvd.  
Southampton, PA 18966-0514Phone: 215-355-3900  
Fax: 215-355-7231

Bill to/Report to: (if different)

Client/Acct. No. AS0032 | KIN-BUC

Address LANDFILL

Sampling Site Address: (if different)

City/State/Zip EDISON, NJ

Phone/Fax

P.O. No.

Client Contact GLENN G.

QC Contact

Lab LIMS No:

4758095

## MATRIX CODES

## LAB USE ONLY:

# Ascorbic/HCl Vials # HCl Vials

# Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>

# Na OH/Zn acetate pH

# HNO<sub>3</sub> pH# H<sub>2</sub>SO<sub>4</sub> pH

# NaOH pH

# Unpreserved

# Hcl pH

# Temp control ID#

DW: DRINKING WATER

GW: GROUND WATER

WW: WASTEWATER

SO: SOIL

SL: SLUDGE

OIL: OIL

SOL: NON SOIL SOLID

MI: MISCELLANEOUS

X: OTHER

Field pH, Temp (C or F),  
DO, Cl<sub>2</sub>, S. Cond. etc.

## PROJECT

## Collection

G  
R  
A  
BC  
O  
M  
PMatrix  
Code

## Number of Containers

Total

H  
2  
S  
O  
4H  
C  
lY  
2  
SH  
N  
O  
3N  
a  
O  
HZ  
n  
a  
cU  
n  
p  
r  
e  
s  
e  
r  
v  
e  
dB  
a  
c  
t  
e  
r  
i  
a  
l

## FIELD ID

Date

Military Time

EFFLUENT DISCHARGE

9-9-13  
9-10-131100  
1100

X

U

U

1

## ANALYSIS REQUESTED

BIOASSAY

SAMPLED BY: (Name/Company)

AS/QC

Verbal/fax data due: / /

Hardcopy due: / /

Report Format: ☐ Standard ☐ Forms☐ Standard + QC ☐ NJ Reduced ☐ Disk

Field Parameters Analyzed By:

Sig:

Date/Time:

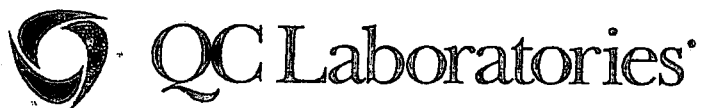
Please call for pricing and availability on rush (&lt;14-21 day) turnaround and on all but standard format.

SAMPLE CUSTODY EXCHANGES MUST BE DOCUMENTED BELOW. USE FULL LEGAL SIGNATURE, DATE AND MILITARY TIME (24 HOUR CLOCK, I.E. 8AM IS 0800, 4 PM IS 1600)

| RELINQUISHED BY SAMPLER | DATE    | TIME | RECEIVED BY | DATE    | TIME | DELIVERY METHOD: <input checked="" type="checkbox"/> QC COURIER <input type="checkbox"/> CLIENT | Custody Seal Number |
|-------------------------|---------|------|-------------|---------|------|---|---------------------|
| 1 AS/QC                 | 9-10-13 | 1700 | 1 cooler 16 | 9-10-13 | 1700 | <input type="checkbox"/> UPS <input type="checkbox"/> FEDEX <input type="checkbox"/> OTHER      | 9-10-13             |
| RELINQUISHED BY         | DATE    | TIME | RECEIVED BY | DATE    | TIME | COMMENTS:   |                     |
| 2 WAC                   | 9-11-13 | 735  | 2 WAC       | 9-11-13 | 735  |   |                     |
| RELINQUISHED BY         | DATE    | TIME | RECEIVED BY | DATE    | TIME |   |                     |
| 3                       |         |      | 3           |         |      |   |                     |
| RELINQUISHED BY         | DATE    | TIME | RECEIVED BY | DATE    | TIME |   |                     |
| 4                       |         |      | 4           |         |      |   |                     |
| RELINQUISHED BY         | DATE    | TIME | RECEIVED BY | DATE    | TIME | Hazardous: yes / no   |                     |
| 5                       |         |      | 5           |         |      |   |                     |

For example to aid completion, see reverse side.

FINAL REPORT



## AQUATIC TOXICOLOGY LAB - CHAIN OF CUSTODY

Study Number: 4758095Facility Name or Code: Km - BucTest Type: ☒ Acute ☐ Chronic ☐ Sediment ☐ Pure Compound ☐ OtherSample Number: ☐ D001 ☐ D002 ☐ D003 ☐ E001 ☒ E002 ☐ E003 ☐ E004 ☐ E005 ☐ E006If sample is comprised of splits, will the splits be homogenized prior to use:  
(note: if split, assign A, B, C...to sample number--add Z if samples are homogenized.)

Splits to be homogenized:

Description of Sample: ☒ Effluent ☐ Non-Contact Cooling Water ☐ Contact Cooling Water  
☐ Dilution Waters ☐ Groundwater/pump and treat ☐ Other:Location of Sampling: ☒ Final (post treatment) ☐ Final-Prechlorinated ☐ Final-Chlorinated ☐ Outfall Outlet  
☐ Receiving Waters ☐ Other:Sample type: ☐ Grab ☒ 24 Hour Composite ☐ \_\_\_\_\_ Hour Composite  
☐ Time Proportional ☐ Flow Proportional ☐ Refrigerated/Iced in Field

Sample Collection:

Date/Time Initiated:

Date/Time Terminated:

Was sampler chain-of-custody seal intact at sample retrieval: ☐ Yes ☐ No

Volume of Sample: \_\_\_\_\_ Liters / Gallons

Container Type: ☐ FDA Grade Plastic ☐ Glass ☐ Stainless Steel

Storage and Transport Conditions:

☐ Iced/Cooler

Temp. (°C) upon collection: \_\_\_\_\_

☐ Field Collected/Transported to Lab☐ Overnight Courier

|                          |      |      |                      |                |            |
|--------------------------|------|------|----------------------|----------------|------------|
| Relinquished by Sampler: | Date | Time | Received By:         | Date           | Time       |
|                          |      |      | <u>Sharon Collet</u> | <u>9.11.13</u> | <u>735</u> |
| Relinquished by:         | Date | Time | Received By:         | Date           | Time       |
|                          |      |      |                      |                |            |
| Relinquished by:         | Date | Time | Received By:         | Date           | Time       |
|                          |      |      |                      |                |            |

Condition of Sample upon Receipt:

☒ Contained☒ Accepted☐ Compromised / Explain below☐ Rejected / Explain below

Sample Refrigerated (date/time/sig.):

### Sample Data and Use

| Initial Sample Data |     |             |                         |           | Dates used in Toxicity Test |         | Sample   | Sample Terminated |      |
|---------------------|-----|-------------|-------------------------|-----------|-----------------------------|---------|----------|-------------------|------|
| temp (°C)           | pH  | D.O. (mg/L) | Cond./Sal*              | TRC (ppm) | Date(s)                     | Time(s) | Split ID | Date              | Time |
| 5.0                 | 8.3 | 8.4         | <del>9850</del><br>9850 | 10.1      | 9.11.13                     | 1415    |          | 9.12.13           | 820  |
| Notes:              |     |             |                         |           |                             |         |          |                   |      |
|                     |     |             |                         |           |                             |         |          |                   |      |
|                     |     |             |                         |           |                             |         |          |                   |      |

\*Conductivity measured in umhos; salinity measured in g/oo

Sample Manipulations:

☒ Sealed☐ pH Adjusted

mL's 0.1 N HCL \_\_\_\_\_

mL's 0.1 N NaOH \_\_\_\_\_

☐ Final pH \_\_\_\_\_☐ Aerated/Due to:☐ Supersaturation☐ D.O. < 40% of Sat. / final D.O. after aeration: \_\_\_\_\_ mg/L☐ Dechlorinated

\_\_\_\_\_ mgs anhydrous sodium thiosulfate used per liter (show math below or back)

Comments:



1205 Industrial Blvd.  
Southampton, PA 18966-0514

Phone: 215-355-3900  
Fax: 215-355-7231

# CHAIN OF CUSTODY

Page 1 of 1

Bill to/Report to: (if different)

Client/Acct. No. AS0032 RIN BVC

Address

Landfill

Sampling Site Address: (if different)

City/State/Zip EDISON, NJ

Phone/Fax

P.O. No.

Client Contact GLENN G.

QC Contact

Lab LIMS No:

4788095

## MATRIX CODES

### LAB USE ONLY:

#      Ascorbic/HCl Vials #      HCl Vials

#      Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>

#      Na OH/Zn acetate pH

#      HNO<sub>3</sub> pH

#      H<sub>2</sub>SO<sub>4</sub> pH

#      NaOH pH

#      Unpreserved

#      Hcl pH

#      Temp control ID#     

DW: DRINKING WATER

GW: GROUND WATER

WW: WASTEWATER

SO: SOIL

SL: SLUDGE

OIL: OIL

SOL: NON SOIL SOLID

MI: MISCELLANEOUS

X: OTHER

Field pH, Temp (C or F),  
DO, Cl<sub>2</sub>, S. Cond. etc.

### ANALYSIS REQUESTED

BIOASSAY

### PROJECT

### Collection

GRA  
B

COMP

Matrix  
Code

### Number of Containers

Total

H<sub>2</sub>O<sub>4</sub>

HCl

Y

HNO<sub>3</sub>

NaOH

Zn

NaOH

Unpres

Bact

Temp

ID#

### FIELD ID

Date

Military Time

EFFLUENT DISCHARGE

9-10-13

1200

9-11-13

1200

X

WW

1

1

1

1

1

1

1

1

1

1

1

1

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SAMPLED BY: (Name/Company)

AS/QC

Verbal/fax data due: / /

Hardcopy due: / /

Report Format: ☐ Standard ☐ Forms

☐ Standard + QC ☐ NJ Reduced ☐ Disk

Field Parameters Analyzed By:

Sig:

Date/Time:

Please call for pricing and availability on rush (<14-21 day) turnaround and on all but standard format.

SAMPLE CUSTODY EXCHANGES MUST BE DOCUMENTED BELOW. USE FULL LEGAL SIGNATURE, DATE AND MILITARY TIME (24 HOUR CLOCK, I.E. 8AM IS 0800, 4 PM IS 1600)

RELINQUISHED BY SAMPLER

1 Glenn G.

DATE

9-11-13

TIME

1700

RECEIVED BY

10000 39

DATE

9-11-13

TIME

1700

DELIVERY METHOD: ☒ QC COURIER ☐ CLIENT

☐ UPS ☐ FEDEX ☐ OTHER

Custody Seal Number

9-11-13

RELINQUISHED BY

2 WA

DATE

9-12-13

TIME

0615

RECEIVED BY

2

DATE

9-12-13

TIME

0615

COMMENTS:

RELINQUISHED BY

3

DATE

TIME

RECEIVED BY

3

DATE

TIME

RELINQUISHED BY

4

DATE

TIME

RECEIVED BY

4

DATE

TIME

RELINQUISHED BY

5

DATE

TIME

RECEIVED BY

5

DATE

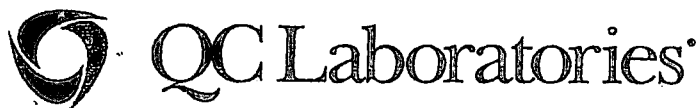
TIME

Hazardous: yes / no

300/AT/AS/1000

For example to aid completion, see reverse side.

FINAL REPORT



## AQUATIC TOXICOLOGY LAB - CHAIN OF CUSTODY

Study Number: 4758095Facility Name or Code: Kim-BucTest Type: ☒ Acute ☐ Chronic ☐ Sediment ☐ Pure Compound ☐ OtherSample Number: ☐ D001 ☐ D002 ☐ D003 ☐ E001 ☐ E002 ☒ E003 ☐ E004 ☐ E005 ☐ E006If sample is comprised of splits, will the splits be homogenized prior to use:  
(note: if split, assign A, B, C...to sample number—add Z if samples are homogenized.)

Splits to be homogenized:

Description of Sample: ☒ Effluent ☐ Non-Contact Cooling Water ☐ Contact Cooling Water  
☐ Dilution Waters ☐ Groundwater/pump and treat ☐ Other:Location of Sampling: ☒ Final (post treatment) ☐ Final-Prechlorinated ☐ Final-Chlorinated ☐ Outfall Outlet  
☐ Receiving Waters ☐ Other:Sample type: ☐ Grab ☒ 24 Hour Composite ☐ \_\_\_\_\_ Hour Composite  
☐ Time Proportional ☐ Flow Proportional ☐ Refrigerated/Iced in Field

Sample Collection:

Date/Time Initiated:

Date/Time Terminated:

Was sampler chain-of-custody seal intact at sample retrieval: ☐ Yes ☐ NoVolume of Sample: \_\_\_\_\_ Liters / Gallons Container Type: ☐ FDA Grade Plastic ☐ Glass ☐ Stainless SteelStorage and Transport Conditions: ☐ Iced/Cooler Temp. (°C) upon collection: \_\_\_\_\_  
☐ Field Collected/Transported to Lab ☐ Overnight Courier

|                          |      |      |                        |      |      |
|--------------------------|------|------|------------------------|------|------|
| Relinquished by Sampler: | Date | Time | Received By: <u>NW</u> | Date | Time |
| Relinquished by:         | Date | Time | Received By:           | Date | Time |
| Relinquished by:         | Date | Time | Received By:           | Date | Time |

Condition of Sample upon Receipt: ☒ Contained ☒ Accepted ☐ Compromised / Explain below ☐ Rejected / Explain below

Sample Refrigerated (date/time/sig.):

### Sample Data and Use

| Initial Sample Data      |             |             |             |            | Dates used in Toxicity Test |             | Sample   | Sample Terminated |            |
|--------------------------|-------------|-------------|-------------|------------|-----------------------------|-------------|----------|-------------------|------------|
| Temp (°C)                | pH          | D.O. (mg/L) | Cond./Sal*  | TRC (ppm)  | Date(s)                     | Time(s)     | Split ID | Date              | Time       |
| <u>62.1</u><br><u>50</u> | <u>8.37</u> | <u>8.4</u>  | <u>9860</u> | <u>Low</u> | <u>9.12.13</u>              | <u>1410</u> |          | <u>9.13.13</u>    | <u>800</u> |
| Notes:                   |             |             |             |            |                             |             |          |                   |            |
|                          |             |             |             |            |                             |             |          |                   |            |

\*Conductivity measured in umhos; salinity measured in g/oo

Sample Manipulations:

☒ Sealed☐ pH Adjusted

mL's 0.1 N HCL \_\_\_\_\_

mL's 0.1 N NaOH \_\_\_\_\_

☐ Final pH \_\_\_\_\_☐ Aeration/Due to:☐ Supersaturation☐ D.O. < 40% of Sat. / final D.O. after aeration: \_\_\_\_\_ mg/L☐ Dechlorinated

\_\_\_\_\_ mgs anhydrous sodium thiosulfate used per liter (show math below or back)

Comments:



1205 Industrial Blvd. Phone: 215-355-3900  
Southampton, PA 18966-0514 Fax: 215-355-7231

# CHAIN OF CUSTODY

Page 1 of 1

Bill to/Report to: (if different)

Client/Acct. No. AS0032 KIN-BUC

Address LANDFILL

Sampling Site Address: (if different)

City/State/Zip EOLSEN, NJ

Phone/Fax

P.O. No.

Client Contact GLENN GRIEB

QC Contact

Lab LIMS No: 4758095

## LAB USE ONLY:

# Ascorbic/HCl Vials # HCl Vials

# Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>

# Na OH/Zn acetate pH

# HNO<sub>3</sub> pH

# H<sub>2</sub>SO<sub>4</sub> pH

# NaOH pH

# Unpreserved

# Hcl pH

# Temp control ID#

## MATRIX CODES

DW: DRINKING WATER

GW: GROUND WATER

WW: WASTEWATER

SO: SOIL

SL: SLUDGE

OIL: OIL

SOL: NON SOIL SOLID

MI: MISCELLANEOUS

X: OTHER

Field pH, Temp (C or F),  
DO, Cl<sub>2</sub>, S. Cond. etc.

## ANALYSIS REQUESTED

BIOASSAY

## PROJECT

### Collection

GRAB

COMB

Matrix Code

### Number of Containers

Total H<sub>2</sub>O HCl Vials HNO<sub>3</sub> NaOH ZnAc Unpres Hcl Bact

## FIELD ID

Date

Military Time

EFFLUENT DISCHARGE

9-11-13 1415

9-12-13 1415

XWW

1

1

SAMPLED BY: (Name/Company)

AS/QC

Verbal/fax data due: / /

Hardcopy due: / /

Report Format: ☐ Standard ☐ Forms

☐ Standard + QC ☐ NJ Reduced ☐ Disk

Field Parameters Analyzed By:

Sig:

Date/Time:

Please call for pricing and availability on rush (<14-21 day) turnaround and on all but standard format.

SAMPLE CUSTODY EXCHANGES MUST BE DOCUMENTED BELOW. USE FULL LEGAL SIGNATURE, DATE AND MILITARY TIME (24 HOUR CLOCK, I.E. 8AM IS 0800, 4 PM IS 1600)

RELINQUISHED BY SAMPLER

1 *Alenfillo*

DATE

TIME

9-12-13 1700

RECEIVED BY

1 *Cooley* 33

DATE

TIME

9-12-13 1700

DELIVERY METHOD: ☒ QC COURIER ☐ CLIENT

☐ UPS ☐ FEDEX ☐ OTHER

Custody Seal Number

9-12-13

RELINQUISHED BY

2 *W*

DATE

TIME

9-13-13 140

RECEIVED BY

2 *W*

DATE

TIME

9-13-13 140

COMMENTS:

RELINQUISHED BY

3

DATE

TIME

RECEIVED BY

3

DATE

TIME

RELINQUISHED BY

4

DATE

TIME

RECEIVED BY

4

DATE

TIME

RELINQUISHED BY

5

DATE

TIME

RECEIVED BY

5

DATE

TIME

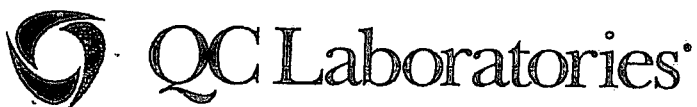
Hazardous: yes / no

2°C at 15/1600

For example to aid completion, see reverse side.

FINAL REPORT





## AQUATIC TOXICOLOGY LAB - CHAIN OF CUSTODY

Study Number: **4758095**

Facility Name or Code: **Km-Buc**

Test Type: ☒ Acute ☐ Chronic ☐ Sediment ☐ Pure Compound ☐ Other

Sample Number: ☐ D001 ☐ D002 ☐ D003 ☐ E001 ☐ E002 ☐ E003 ☒ E004 ☐ E005 ☐ E006

If sample is comprised of splits, will the splits be homogenized prior to use:  
(note: if split, assign A, B, C...to sample number—add Z if samples are homogenized.)

Splits to be homogenized:

Description of Sample: ☒ Effluent ☐ Non-Contact Cooling Water ☐ Contact Cooling Water  
☐ Dilution Waters ☐ Groundwater/pump and treat ☐ Other:

Location of Sampling: ☒ Final (post treatment) ☐ Final-Prechlorinated ☐ Final-Chlorinated ☐ Outfall Outlet  
☐ Receiving Waters ☐ Other:

Sample type: ☐ Grab ☒ 24 Hour Composite ☐ \_\_\_\_\_ Hour Composite  
☐ Time Proportional ☐ Flow Proportional ☐ Refrigerated/Iced in Field

Sample Collection: Date/Time Initiated: \_\_\_\_\_ Date/Time Terminated: \_\_\_\_\_

Was sampler chain-of-custody seal intact at sample retrieval: ☐ Yes ☐ No

Volume of Sample: \_\_\_\_\_ Liters / Gallons Container Type: ☐ FDA Grade Plastic ☐ Glass ☐ Stainless Steel

Storage and Transport Conditions: ☐ Iced/Cooler Temp. (°C) upon collection: \_\_\_\_\_  
☐ Field Collected/Transported to Lab ☐ Overnight Courier

|                          |      |      |                        |         |      |
|--------------------------|------|------|------------------------|---------|------|
| Relinquished by Sampler: | Date | Time | Received By:           | Date    | Time |
|                          |      |      | <i>Shannon Collins</i> | 9.13.13 | 740  |
| Relinquished by:         | Date | Time | Received By:           | Date    | Time |
|                          |      |      |                        |         |      |
| Relinquished by:         | Date | Time | Received By:           | Date    | Time |
|                          |      |      |                        |         |      |

Condition of Sample upon Receipt: ☒ Contained ☒ Accepted ☐ Compromised / Explain below ☐ Rejected / Explain below

Sample Refrigerated (date/time/sig.):

### Sample Data and Use

| Initial Sample Data |      |             |            |           | Dates used in Toxicity Test |         | Sample   | Sample Terminated |      |
|---------------------|------|-------------|------------|-----------|-----------------------------|---------|----------|-------------------|------|
| temp (°C)           | pH   | D.O. (mg/L) | Cond./Sal* | TRC (ppm) | Date(s)                     | Time(s) | Split ID | Date              | Time |
| 5.0                 | 8.55 | 8.9         | 10,440     | 20.1      | 9.13.13                     | 1405    |          | 9.14.13           | 820  |
| Notes:              |      |             |            |           |                             |         |          |                   |      |
|                     |      |             |            |           |                             |         |          |                   |      |
|                     |      |             |            |           |                             |         |          |                   |      |

\*Conductivity measured in umhos; salinity measured in g/oo

Sample Manipulations: ☒ Salted ☐ pH Adjusted mL's 0.1 N HCL \_\_\_\_\_ mL's 0.1 N NaOH \_\_\_\_\_ ☐ Final pH \_\_\_\_\_  
☐ Aerated/Due to: ☐ Supersaturation ☐ D.O. < 40% of Sat. / final D.O. after aeration: \_\_\_\_\_ mg/L  
☐ Dechlorinated \_\_\_\_\_ mgs anhydrous sodium thiosulfate used per liter (show math below or back)

Comments: